
The Catalyst



The Newsletter for Interpretation in California State Parks

Summer 2003

Volume 7 No. 1

Look! Up in the Sky!

Red Alert! Red Alert! Mars is approaching! This August and September, Mars will be at its closest distance away from Earth, a mere 34.6 million miles. This is larger than anyone has ever seen it since the telescope was invented in 1608. Usually during the Earth- Mars meeting, our neighbor is roughly 45 million miles away with really close visits about 38 million miles.

It will grow large enough in the night sky that you can easily view surface features using a 150x magnification telescope. If you just have your eyes for viewing, watch as Mars gets dramatically brighter as it rushes toward you from now through August. It will reach its closest proximity on August 27th.

Where to start looking? Find the constellation of Aquarius about halfway up the southeastern sky, Mars will



be the very bright orangey colored disk. Even from the big cities it will be easy to spot. The event will pass quickly though. By autumn Mars will lose half its brilliance, so savor this opportunity for a rare close-up look at our mysterious neighbor.

Other more mundane celestial events occur throughout the summer but much is washed out by brilliant Mars. Venus and Jupiter are no longer visible as they hide behind the sun and the Perseids meteor shower is outshone by the full moon. One event to look for if you can find **dark** skies, is Uranus's opposition on August 24th when it can be dimly glimpsed above Mars by the naked eye.

Enjoy the view and keep your eyes to the sky! 🐾



Catalyst is published periodically by California State Parks. ©2003. Opinions expressed are those of the author and not necessarily those of California State Parks. By submitting a manuscript the author warrants to Catalyst that it does not infringe on any copyrights and that the author assumes full responsibility for any such infringement. Please contact the editor for permission to reprint any item appearing in Catalyst.

**For address changes or to request a *free* subscription, contact Pam Rocksvold at (916) 654-2249
procksvold@parks.ca.gov.**

ISSN 1089-9286

Catalyst Editor: Brian Cahill
Colorado Desert District
200 Palm Canyon Drive
Borrego Springs, CA 92004
(760) 767-3716
FAX (760) 767-3427
bcahill@parks.ca.gov

Contributor's Guidelines

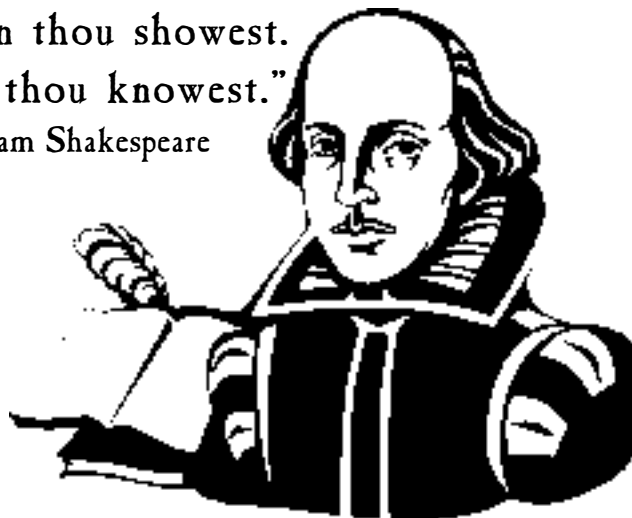
The Catalyst welcomes your original articles of any length! Or, send copies of stories published elsewhere that you think our readers will appreciate. Be sure to include information about the publication so we can get permission to use the material. You may submit an article at any time.

We **really** appreciate articles submitted on disk or by e-mail. We can read most formats of DOS/Windows disks. Printed manuscripts, facsimile or phone messages are also accepted. Please advise if you would like your diskette returned, otherwise we will recycle it in our office to save postage.

Illustrations are strongly encouraged. Drawings, graphs or other illustrations may be submitted on disk or hard copy. Black & white glossy photos are preferred; color prints or slides are usually acceptable. All photos and artwork submitted will be returned promptly.

**"Have more than thou showest.
Speak less than thou knowest."**

— William Shakespeare



The Catalyst Committee

| | | | | |
|----------------|---------|-------------------|----------------|--------------------|
| Karen Beery | SPI II | So. Svc. Ctr. | (619) 688-6103 | FAX (619) 220-5400 |
| Wes Chapin | DIS | Channel Coast | (805) 899-1406 | FAX (805) 899-1415 |
| Diane McGrath | SPI III | San Simeon | (805) 927-2049 | FAX (805) 927-2117 |
| Julie Payne | SPI I | San Simeon | (805) 927-2014 | FAX (805) 927-2031 |
| Donna Pozzi | CEA | Interp./ Ed. Div. | (916) 653-4643 | FAX (916) 654-9048 |
| Jenan Saunders | SPI II | Interp./ Ed. Div. | (916) 653-0768 | FAX (916) 654-9048 |
| Mary Stokes | DIS | Four Rivers | (209) 826-1196 | FAX (209) 826-0284 |
| John Werminski | RIS | Interp./ Ed. Div. | (916) 653-8959 | FAX (916) 654-9048 |

From the Editor

Summer is here again. That's when several million of the nicest people you'd ever meet and a handful of grouchy old troublemakers pour into California's 277 State Parks. We hope you are hanging-in-there and offering world class interpretation to all of them.



Just in time for summer, a particularly fun bunch of interpretive resources and training opportunities fills the next page. And you will find the Master Interpreter, presiding on page 5 as usual, offering gratuitous advice to the interpretively challenged.

Page 6 brings *History Goes Virtual: CSRM Library Debuts Online Offerings*. Written by Ellen Halteman, Senior Librarian, California State Railroad Museum, who can be reached at library@californiastaterailroadmuseum.org

We celebrate another big victory on page 8. *State Parks Again Wins Big at SIOC Awards* by Jenan Saunders tells the story. Jenan is with the Interpretation & Education Division and would love to hear from you at jsaunders@parks.ca.gov.

On Page 10 you'll find *Putting Geologic Time Into Perspective — California Style*. It is written by R. Forrest Hopson of the Geological Information Services in Reno, Nevada, who can be reached at fhopson@geoinfoservices.net. It helps to interpret a complex subject, the chronological sequence of the state's geologic creation. Compressing events into a single year makes it easier to see the relative spacing between those events, but of course there's much more to this story than will fit in these pages.

Page 13 takes a peek at the BVST 25 Cadets as they complete their interpretive training. Page 14 brings a piece from Troy Dunham, an award winning Living History Interpreter. Troy works with many California State Historic Parks, including Petaluma Adobe and Fort Ross, and also participates in the programs at Fort Vancouver and Fort Nisqually in Washington State.

It is time to start thinking about attending the National Interpreter's Workshop in Reno this November. Perhaps you should plan to go. Page 16 provides a few more tips to help you get there.

On page 17, I am pleased to bring you a piece titled *Radical Rants: Seasonal Justice*. While the message hits close to home, it comes to us all the way from Wood Lake, in Minnesota. The author, Karen I. Shragg, has contributed to Catalyst before and we are pleased to welcome her back. This piece also appeared in *Buffalo Bull*, the NAI Region V newsletter and is reprinted here with permission.

Since there are quite a few exhibit projects underway these days we thought we'd consider a package that National Parks uses for Exhibit Planning. Learn all about it on page 18. It is written by Joanie Stadtherr Cahill, who can be contacted at jcahill@parks.ca.gov.

On page 20 you will find a piece by Jaime Mendez, part of her ongoing series, "The Road Less Traveled." Jaime is a Guide I at Hearst Castle;® you can email her at tahquish@att.net.

And you'll find another installment of "California's Tapestry," back in its usual place.

Thanks to each of you for reading *Catalyst*! We hope you have a GREAT summer! 🐾



Brian Cahill, Editor

**Do we have your correct address?
Please check your distribution /
mailing label on the back cover. If
you are in a diferent District now,
please tell us! Contact Pam
Rocksvold at (916) 654-2249 or
procksvold@parks.ca.gov. Thanks!**

What's Up?



Interpreters' Resources

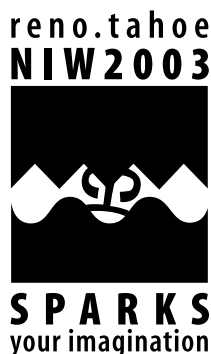
CAM Conference

The California Association of Museums annual conference will be held in Los Angeles July 16-18. This year's theme is Creativity: Using Change to Energize Your Museum. Sessions addressing a variety of issues pertinent to museums will be supplemented with special events at places like the Autrey Museum of Western Heritage and the LA Zoo. For more information call (714) 542-2611.

NIW 2003

National Interpreter's Workshop, November 11-15, 2003, John Ascuaga's Nugget, Sparks, Nevada. See:

www.interpnet.com. Keep checking; updates will be posted there as soon as they are available. Early registration will be \$315. California State Parks is a workshop cosponsor.



CIM Certification

A Certified Interpretive Manager training workshop will be held December 10 - 15 at Eagle Creek, Oregon. Ideal for anyone who manages a facility, supervises staff, prepares budgets, or is otherwise responsible for the daily operations of an interpretive site. For details, call toll free (866) 326-4642, or see: www.interpnet.com.

Frog Tongues

Do you interpret amphibians and need a new activity? Or how about an icebreaker for your seasonal training? Just get a supply of those party blow-out toys and a jar of bubbles. Give everyone in the room a frog tongue (blow out), then fill the air with flies (bubbles). Turn everyone loose to see how many flies they can nail with their tongues!

PLT Newsletter

Check out the Branch, a newsletter for Project Learning Tree, an "interdisciplinary environmental education program for educators working with students in Pre-K through grade 12." Full Text online and in PDF format, see: www.plt.org/newsletter/index.cfm

Scat Vocabulary

Any fourth-grader can give you at least a dozen scat related words; but here are a few more that maybe you can use to impress your friends! Fewmets - deer pellets
Crotils or Crotisings - hare pellets
Billiting - fox feces
Frass - caterpillar poop
Lesses - boar, bear or wolf droppings
Mutes - hawk excrement
Coprolite - fossilized doo
Spatilomancy - old fortune telling process involving animal droppings
Stercoricolous - living in dung (tell your children how you feel about their room)
Sterquilinian - "of the dung hill" (might be useful in certain office memos)

Summer Reading

We recommend a fun book with a serious message for your summer reading. *Last Chance to See* is by Douglas Adams (of the *Hitchhiker's Guide* fame). The BBC sent a team to film some of the most endangered animal species throughout the world and Adams tagged along.

Remember, if you can't connect with something, it's easy to become complacent. Adams helps his readers connect. He moves rapidly from informal, laugh-out-loud descriptions of his travels to serious pleas for awareness and conservation of all animals. Buy one for a friend, only \$13.95 at your favorite bookseller.



New Jr. Ranger Badge

This season we have all-new Junior Ranger badges. This metal badge is a quality item that will be highly prized by our young park visitors. Make sure you have received the instructions that were included with your new materials, as the rules have changed a bit. Supplies are somewhat limited, but we will try to get you what you need. Request them through your District Interpretive Coordinator.

Dear Master Interpreter

Dear Master Interpreter,

I've worked seasonally for State Parks for 5 years.

Because of retirements, unadvertised vacancies,

funding and "salary savings," my last two seasons in a very busy park were WITHOUT a Unit Ranger. I am all too familiar with the current budget crisis, and how this situation directly affects front-line park interactions (and it DOES!). At this time, it looks as though we may be hiring only one Interpreter in our sector of four units, compared to the usual three.

Though I look forward to completing my education, and it's my dream to obtain permanent employment with State Parks, I am often frustrated by the bleak future.

My question: How can I possibly keep my spirits up and feel like I'm making a good decision when interpretation, like the arts and music in schools, is the first to get the ax? It feels that there is no bright light at the end of the tunnel this time. Any advice for a budding young Interpreter questioning the future of not only the budget crisis, but possibly her career choice?

**Sign me,
"The future's not so bright,
do I really need these shades?"**



Dear Bright Future,

Sure, it's a tough time to be entering the job market in any field. But it was no picnic back in the mid-seventies either. This year's graduates are facing tough prospects everywhere. Some are even going into grad school just to postpone job-seeking in these difficult times.

Take a moment to understand some of the political realities. There are many people who believe there are too many government workers. It may sound O.K. in the abstract, but who really wants fewer teachers or prison guards or even interpreters? Voters are simply hoping to make government employees more efficient by keeping the numbers limited. So the Governor instituted a hiring freeze.

A freeze focuses on entry level positions. However as upper-levels invariably retire, promote or otherwise vacate the positions, then entry level people move up, leaving vacancies behind. Maybe the interpreter situation will become critical enough to justify an exception to the freeze.

At the same time, the whole department is trapped by some unfortunate demographics. Unprecedented numbers of employees are reaching retirement age. This is hitting the ranger ranks particular hard, as you have seen. So we are going to a lot of retirement parties these days and working hard to recruit and train new rangers. The ranger shortage is most acute because there are so many rangers, and they are crucial to

operating our parks. So a lot of effort is being made, but it will take awhile to get where we need to be.

While the interpreter numbers aren't as big as ranger numbers, there is also a very real demand for interpreters. There are several crucial vacancies throughout the state. Additional upper-level vacancies will surely further deplete the ranks.

This demand is gradually being acknowledged by management. But it is real tough to try to justify an entry level exam during a hiring freeze. Hang in there! No matter how bleak the times are, there are always opportunities somewhere, for talented people.

Some new interpreters are avoiding this whole situation by turning to the interpretive field's brightest corner right now, ecotourism. Look into a job in ecotourism or other options if you must, but continue to monitor state park exam announcements. Ours is important work. Opportunities will come around again, and we will need people like you.

MI

Dear Master Interpreter,

How is it one careless match can start a forest fire, but it takes a whole box to start a campfire?

Smoke Eater

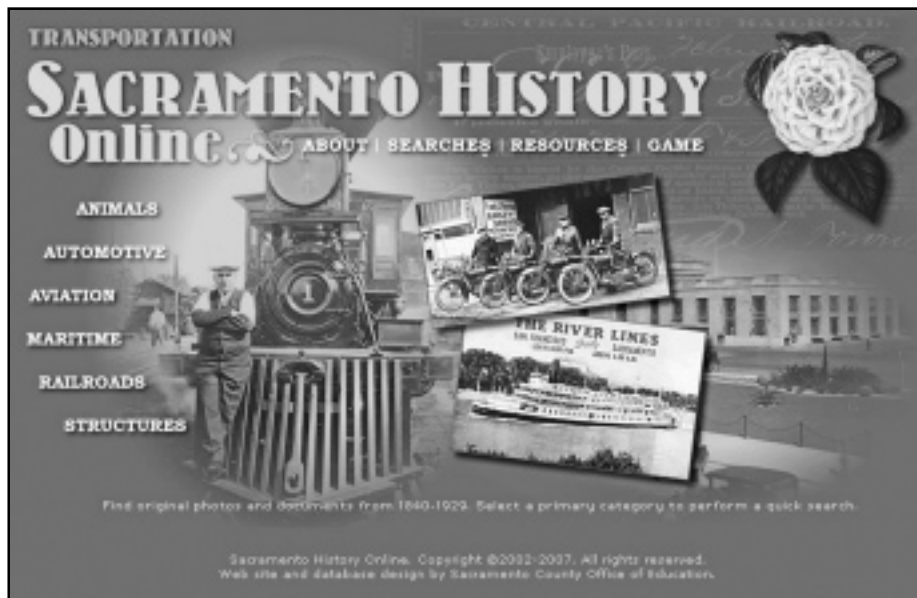
History Goes Virtual: CSRM Library Debuts Online Offerings

By Ellen Halteman, Senior Librarian,
California State Railroad
Museum

The California State Railroad Museum Library announces the launch of two new online resources. *Sacramento History Online* is a digital library of rare and primary sources relating to the history of the Sacramento County area. Search www.sachistoryonline.org to find primary source materials from the collections of four Sacramento research institutions. *Sacramento History Online* is a joint endeavor of California State Parks' largest public research library, the California State Railroad Museum Library, the California State Library's California History Room, the Sacramento Archives and Museum Collection Center, and the Sacramento Public Library's Sacramento Room.

The U.S. Institute of Museum and Library Services funded the project under the Library Services & Technology Act (LSTA), administered in California by the State Librarian. Each year since 1957, the program has awarded grants on a competitive basis for locally initiated proposals. The LSTA supports projects involving the innovative use of technology, networking and resource sharing, as well as the development of targeted library and information services.

During the first year of the grant (2001-2002), the partners selected



Sacramento History Online is a digital library of rare and primary sources relating to the history of the Sacramento County area. It brings together materials from the collections of four Sacramento research institutions.

primary source materials relating to the history of transportation in the Sacramento Valley region from the mid-19th century to the late 1920s. With an eye for diversity, striking imagery and content, each institution

of transportation. During a second year of funding (2002-2003), the partners are adding materials that tell the story of the region's rich agricultural history.

Sacramento History Online introduces users to the California State Railroad Museum Library's documentary collections, giving website visitors a chance to sample the CSRM Library's diverse holdings.

selected some 250 examples from their collections to illustrate travel, recreation and commerce as they relate to railroad, bicycle, airplane, maritime and animal-powered modes

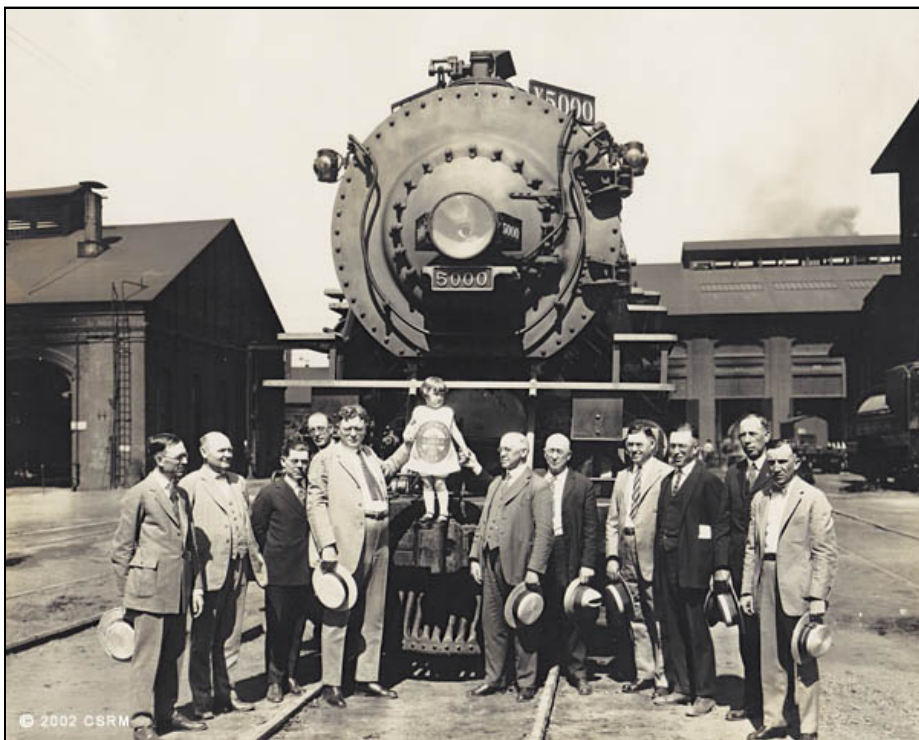
Two easy-to-use search screens allow students to search transportation topics by keyword, or to narrow the query by date, transportation mode, document type or institution.

Site visitors will find photographs, pamphlets, technical drawings, posters, postcards, book and periodical illustrations, and even a few license plates. The details of full-size drawings, handwritten letters and the full text of selected pamphlets can be studied online or printed for review.

Complementing the image catalog is a narrative history of Sacramento-area transportation, and a timeline. McLean Media, of Grass Valley, created an eight-lesson curriculum guide to assist teachers in making effective use of the website in the classroom. A travel game, useful for school-age children and at-home family learning, entertains as well as educates users of all ages.

Sacramento History Online introduces users to the California State Railroad Museum Library's documentary collections, giving website visitors a chance to sample the CSRM Library's diverse holdings. Links within the image catalog records lead researchers to the Library's online catalogs that are directly available at the Museum's website:
www.californiastaterailroadmuseum.org. Funding for the development and hosting of the CSRM Library online catalogs was provided by a grant from the North American Railway Foundation, headquartered in Harrisburg, Pennsylvania.

The CSRM Library's catalogs have long been available for searching on-site in the reading room. With grant funding, the Library staff was able to realize the goal of providing access to the Museum's collections over the



This is one example of the historic photos in the archive. It shows the celebration for the arrival of a new 3-cylinder compound 4-10-2 class of locomotive, 5000 series. View is looking east. South end of Roundhouse is visible at left.

Internet. Users can search for information about the Library's archives and manuscripts collections; books, periodicals and other published documents; as well as employee timetables and accident reports.

Customized search screens allow for targeted searching of the Library's extensive holdings of technical drawings and documents from the Lima Locomotive Works collection. The Pullman Company negative catalog describes images of rolling stock, both passenger and freight, dating from the late 1880s to the 1940s. About 125 of the over 3,000 catalogued images were scanned and added to the online catalog for viewing. 🐾

The California State Railroad Museum Library is open for research use Tuesday through Saturday, from 1 to 5 p.m. Please contact Library staff at (916) 323-8073 for questions about the Museum's research collections and the newly launched online resources.

State Parks Again Wins Big at SIOC Awards

By Jenan Saunders
Interpretation & Education

On May 8, the State Information Officers Council (SIOC) presented California State Parks with an outstanding number of awards for a variety of publications produced in 2002. Eight parks staff members were in attendance at the awards ceremony, which took place in Sacramento and was emceed by our own Roy Stearns. Below are listed the awards given to State Parks, including the category, award level, name of the project, and name of the individual (or group) responsible for the project.

Mary Helmich, of the Interpretation and Education Division, was granted a Gold Award in the category of Brochure/Pamphlet (1-2 colors) for her Heritage Adventures Brochure Program.

The Interpretive Publications Section earned a Gold Award in the Brochure/Pamphlet (3+ colors) category for the Park Map and Brochure Program, and that entry also took the Grand Prize Award for the entire category.

Laurena Cabañero, of the Interpretive Publications Section, was granted a Gold Award in the Logo category for the logo she created for the National Association of State Parks Directors conference. Laurena also earned a Silver Award in the Poster Category for the Diversity Recognition Posters Program.



Eight parks staff members were in attendance at the awards ceremony, which took place in Sacramento and was emceed by our own Roy Stearns. Pictured (from left to right): front row Pat McLatchey, Carol Cullens, Laurena Cabañero, Leslie Walery; back row Steve Capps, Roy Stearns, and Mary Helmich.

Heather Fargo and Laurena Cabañero, both of the Interpretation and Education Division, earned a Gold Award in the Best Product Impact (more than \$750) category for the Volunteer Recruitment Brochure.

Joe Rosato, Laura Wagner, David L. Widell and the OHMVR Division were selected for a Gold Award in the category of Special Report (3+ colors) for their report entitled, "Taking the High Road," and were then awarded the Grand Prize for that entire category. Joe Rosato, Laura Wagner and Square Tree, Inc., also earned a Silver Award in the Magazine (3+ colors) category for Off-Road Adventures magazine.

Laura Wagner and Crocker/Flanagan were granted a Gold Award in the Posters Category for their three-part poster series entitled "Come Out and Play!"

California State Parks' Communications Office earned a Silver Award in the Newsletter (3+ colors) category for the News and Views newsletter, and a Silver Award for their Public Service Announcement (PSA) entitled, "Big Basin State Park—100 Year Anniversary — Clint Eastwood."

Congratulations to all this year's winners! 🐾



Congratulations to all of our winners — we are proud of your work!



The 2002 Interpretive Publications Section (from left to right): Gail Dudding, Sherri Vargas, Carol Cullens, Pat McLatchey, Laurena Cabañero, Ron Warr, and Tom Lindberg in front.

Putting Geologic Time Into Perspective — California Style

By R. Forrest Hopson

Geological Information Services

Reno, Nevada

fhopson@geoinfoservices.net

Planet Earth formed about 4.6 billion years ago. Since then, any number of significant events has occurred. To name a few, the earliest forms of life made their appearance about 3.8 billion years ago, free oxygen began to accumulate forming a primitive atmosphere about 3 billion years ago, the Atlantic Ocean opened and closed twice following the breakup of the supercontinent Pangaea 200 million years ago, the dinosaurs became extinct 65 million years ago, the Himalaya Mountains began forming about 37 million years ago, and by about 1 million years ago much of our planet was covered in ice during a worldwide glaciation event.

To put the enormity of geologic time into perspective, it would be interesting to scale the entire 4.6 billion years of Earth history into one calendar year. The "year" of Earth history can be subdivided into months, weeks, days, hours, minutes, and seconds. If we were to scale the entire 4.6 billion years of Earth's history into a single calendar year, each day would be equivalent to 12.6 million years, each hour to 525,000 years, each minute to 8,752 years, and each second to 146 years.

This article lists in chronological order the ages of selected important geologic events that occurred in California from the standpoint of one year.

The geologic clock began ticking at midnight on New Year's Eve when the earth formed from a coalescing gas cloud. For the first six months, all was geologically quiet in what was to become California, although other geological events occurred elsewhere

From November 30 on, the pace of the known geologic development of California began to pick up with new events happening every few days. That morning at 10:49, plus or minus a few hours, a series of volcanic island arcs—chains of volcanic

If we were to scale the entire 4.6 billion years of Earth's history into a single calendar year, each day would be equivalent to 12.6 million years, each hour to 525,000 years, each minute to 8,752 years, and each second to 146 years.

around the world. Then on June 26 at 1:34 P.M. the first granitic rocks that have been found crystallized from molten magma that was intruding beneath the newly developing continent.

Although the timing is poorly constrained, things were relatively quiet for another four months or so, but sometime between September 11 at 9:55 P.M. and October 8 at 2:21 A.M. the first sedimentary rocks—limestone—were deposited in shallow seas near Death Valley during the first rifting event in the western United States. On October 21 at 2:05 in the afternoon, a sequence of conglomerate and limestone was laid down during a short-lived extensional event that was also contemporaneous with the first glaciation event in California.

This event was followed by one month of geologic quiescence.

islands—developed off the west coast of the newly developing continent.

For the next two and a half days volcanic activity from the arc was contemporaneous with tectonic transport towards the western continental coast. During the wee hours of the morning—12:55—of December 3, these volcanic island arc rocks as well as surrounding oceanic crustal rocks began accreting to the continent, which was to later become the west slope of the Sierra Nevada, and continued for the next 10 days. Meanwhile, in eastern California and southwestern Nevada at 5:29 A.M. the next day, a thick sequence of mostly carbonate rocks—limestone and dolostone—was deposited in shallow inland seas.

Beginning December 13 at 8:40 A.M., and ending Christmas Day,

magmas rose above the subducting Farallon tectonic plate forming chains of volcanoes along the continental margin between British Columbia and Mexico. Granitic plutons and gold deposits formed from the rising magmas, which include the rocks that make up the Sierra Nevada. On December 19 at 7:18 A.M. a regional metamorphic event known as the Nevadan Orogeny occurred that affected the entire Sierra Nevada as the final earlier-formed volcanic island arc and oceanic crustal rocks were accreted against its western slope.

On December 21 at 4:26 P.M. a line of volcanoes that formed as a result of the subducting Farallon plate had developed at the latitudes between San Diego and San Clemente. The rocks erupted from these volcanoes were to become known as the Santiago Peak volcanics. The beginning of this volcanic island arc event was followed by the deposition of gold between 11:29 A.M. and 9:00 that night, that included the famed Mother Lode gold deposit along the western slope of the Sierra Nevada. A few hours later in the wee hours of December 22—12:48 A.M.—Santiago Peak volcanoes had shut off. On Christmas Day, at 3:39 in the afternoon, granitic intrusion events ended and the ancient Sierra Nevada began to erode.

On the evening of December 26 at 8:13 an inland sea began to form in what is now the Central Valley. Meanwhile, oblique subduction of the Farallon Plate was occurring off the southern California continental margin prompting the earliest stages of right lateral displacement along the San Andreas Fault after 6:40 on the

evening of December 29. At 12:24 the next morning, a local rifting event near the present location of Los Angeles caused the Los Angeles Basin to open. The early Los Angeles Basin served as a center for thick accumulations of sediment later that afternoon. The opening of the Los Angeles Basin was contemporaneous with the end of erosion of the ancient Sierra Nevada, which had been reduced to a rolling upland with low topographic relief.

A few hours later at 6:06 continental rifting of the western United States began, creating the Basin and Range geologic province. This rifting event affected all of eastern California and is still occurring to this day. At 9:54 A.M. a chain of volcanoes was developing along the southern California continental margin owing to the subducting Farallon Plate. Late that afternoon at 5:31 the Transverse Ranges had rotated: 45° clockwise for the eastern Transverse Ranges and 90° clockwise for the western Transverse Ranges. By 7:26 the Farallon Plate had completely subducted beneath the continent, marking the end to volcanism in southern California.

December 31, the final day of the calendar year, California began to take its present form. At 10:40:11 in the morning, the Los Angeles basin had taken its present shape, and less than 2 hours later—12:36:26 P.M.—the present tectonic situation off the coast of northern California was established as the Pacific tectonic plate began subducting beneath the North America plate. This event marks the onset of earliest volcanic activity in the southern Cascade Range, which

continues to this day. At 2:48:42 the modern Sierra Nevada began to rise contemporaneously with the draining of the inland sea that filled the Central Valley. By 4:22:57 northwestern Mexico began pulling away from the Mexican mainland to form the Gulf of California, with the Salton Trough at its north end.

At 6:22:49 there was a major change in California's climate as air temperatures plummeted and the highest peaks in the state, including the Sierra Nevada, were covered with glacial ice. Glaciation continued intermittently for the next 25 seconds. Shortly thereafter at 8:11:29 the Coast Ranges began uplifting, which was followed by the earliest stages of rifting of the San Francisco Bay at 8:34:20. At 8:57:11 volcanic activity in the Central Valley built the Sutter Buttes. By 10:05:45, the Central Valley was completely blocked so streams draining the Sierra Nevada and Coast Ranges formed a shallow lake called Lake Clyde.

Meanwhile, east of the Sierra crest near the California-Nevada boundary and less than 30 seconds later at 10:33:10, Long Valley caldera erupted cataclysmically, sending out voluminous ashflows up to 20 miles north and south of the volcano. At 10:51:27 Lake Clyde had completely dried up. By 11:32:35, pluvial Lake Manly began filling Death Valley, and 26 minutes later it had dried up. Ten seconds later, San Francisco Bay had reached its present level and Lake Tahoe had completely filled, thus marking the final stages of the geologic evolution of California up to now. 🐾

Geologic Time Table

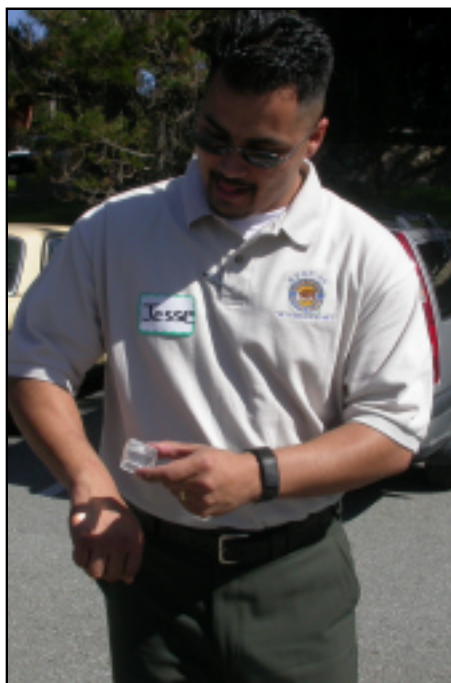
Ages of significant geologic events in California scaled to one year

| Major Events | Region | (Years) | Geologic Age Scaled To One Year | |
|--|---------------------------------|---------------|---------------------------------|---------------|
| | | | Date | Time |
| Earth age | | 4,600,000,000 | January 1 | 00:00:00 |
| First granitic rocks | Southeastern California | 2,400,000,000 | June 26 | 1:33 A.M. |
| First sedimentary rocks | Death Valley | 1,400,000,000 | September 11 | 9:55 P.M. |
| First glaciation event | Death Valley | 900,000,000 | October 8 | 2:05 P.M. |
| Volcanic island arc | Sierra Nevada | 385,000,000 | November 30 | 10:49 P.M. |
| Beginning of accreting | Sierra Nevada | 365,000,000 | December 3 | 12:55 A.M. |
| Carbonate Rocks | Southeastern California | 350,000,000 | December 4 | 5:29 A.M. |
| Beginning of granitic intrusion | | | | |
| British Columbia to Mexico incl. | Sierra Nevada | 216,000,000 | December 13 | 8:40 A.M. |
| Nevada orogeny | Sierra Nevada | 160,000,000 | December 19 | 7:18 A.M. |
| Beginning of Santiago Peak volcanism | Near San Diego | 130,000,000 | December 21 | 4:26 P.M. |
| Beginning of Mother Lode gold deposition | | | | |
| Western Sierra Nevada | | 120,000,000 | December 22 | 11:29 A.M. |
| End of Mother Lode gold deposition | Western Sierra Nevada | 115,000,000 | December 22 | 9:00 P.M. |
| End of Santiago Peak volcanism | Near San Diego | 113,000,000 | December 23 | 12:48 A.M. |
| End of granitic intrusion | | | | |
| British Columbia to Mexico incl. | Sierra Nevada | 80,000,000 | December 25 | 3:39 P.M. |
| Begin erosion of ancient Sierra Nevada | Sierra Nevada | 80,000,000 | December 25 | 3:39 P.M. |
| Begin inland sea | Central Valley | 65,000,000 | December 26 | 8:13 P.M. |
| Begin San Andreas fault | Southern California | 28,000,000 | December 29 | 6:40 P.M. |
| Begin Los Angeles Basin rifting | Los Angeles | 25,000,000 | December 30 | 12:24 A.M. |
| End erosion of ancient Sierra Nevada | Sierra Nevada | 25,000,000 | December 30 | 12:24 A.M. |
| Begin Basin and Range | | | | |
| Western United States incl. | southeastern California | 22,000,000 | December 30 | 6:06 A.M. |
| Rotation of Transverse Ranges | Southern California | 16,000,000 | December 30 | 5:31 P.M. |
| Present shape of Los Angeles Basin | Los Angeles | 7,000,000 | December 31 | 10:40:11 A.M. |
| Uplift of southern Cascade Range | Northeastern California | 6,000,000 | December 31 | 12:34:36 P.M. |
| End inland sea | Central Valley | 5,000,000 | December 31 | 2:28:27 P.M. |
| The modern Sierra Nevada begins to rise | | 5,000,000 | December 31 | 2:28:42 P.M. |
| Begin Gulf Of California rifting | Northwestern Mexico | 4,000,000 | December 31 | 4:22:57 P.M. |
| Begin glaciation | Many California mountain ranges | 3,100,000 | December 31 | 6:22:49 P.M. |
| Uplift of Coast Ranges | Western California | 2,000,000 | December 31 | 8:11:29 P.M. |
| Begin San Francisco Bay rifting | San Francisco Bay Area | 1,800,000 | December 31 | 8:34:20 P.M. |
| Sutter Buttes | Central Valley near Sacramento | 1,600,000 | December 31 | 8:57:11 P.M. |
| Begin filling of Lake Clyde | Central Valley | 1,000,000 | December 31 | 10:05:45 P.M. |
| Bishop Tuff eruption | Mammoth Lakes | 760,000 | December 31 | 10:33:10 P.M. |
| Lake Clyde drained | Central Valley | 600,000 | December 31 | 10:51:27 P.M. |
| Begin filling Lake Manly | Death Valley | 240,000 | December 31 | 11:32:35 P.M. |
| Lake Manly drained | Death Valley | 10,500 | December 31 | 11:58:42 P.M. |
| San Francisco Bay | San Francisco Bay Area | 10,000 | December 31 | 11:58:52 P.M. |
| Lake Tahoe | Eastern California | 10,000 | December 31 | 11:58:52 P.M. |



Cadets Practice Interpretive Techniques

The cadets shown here during the interpretive training phase are members of BVST 25. They recently graduated and are now working throughout the state. We congratulate them on the successful completion of their Academy!



*Can I light myself on fire with a bug box?
Getting ready for the Buggy Olympics.*



Cadets experience activities they can use with school groups and Jr. Rangers. Photos by Joanie Stadtherr Cahill.



Cadet campfire programs are evaluated using the department's RAPPORT form.



Cadets become crabs, seastars and limpets in this game that demonstrates the relationship of the moon and the tidal cycle.

Presentation Hints for Living History

*By Troy Dunham Volunteer,
Petaluma Adobe State Historic Park*

So it's Living History Day at your park! You've done your research, your period outfit looks marvelous, you have your demonstration gear all laid out and you're ready to bring on the park visitors . . . Now what? Some interpreters struggle with finding ways to engage their audience. The following article offers hints and suggestions on ways to connect with our visitors through our attitudes, our speech, our mechanics and the physical layout of our interpretation area.

As interpreters, we always need to be aware of the visitor's perception. When the public walks into a Living History program for the first time, they've entered into a world that may be alien to them. They may wonder, "Why are these people dressed oddly and talking that funny way?" Our visitors may be shy, confused, disoriented, or even intimidated by their new surroundings. It's helpful to give visitors some form of orientation upon entering a Living History event, especially if participants are using first person interpretation techniques. Because the public may feel uncomfortable towards interpreters in period dress at first, we need to extend ourselves effectively to connect with visitors.

Attitude

When we are interpreting, especially in first person, we create a mind-set. Poise is an important part of successful interpreting, no matter which method of presentation you



What works for a uniformed interpreter may be different than what works best for a living history interpreter.

use. Poise shows that you are knowledgeable and comfortable in your role and that confidence truly has a magnetic effect on visitors. Your confidence radiates to the public, and it shows that you are willing and available to interact with them to maximize their enjoyment of the experience. Having confidence doesn't mean being a swaggering "know it all;" that attitude also radiates, but in a negative way. Poise comes with practice and experience, and as they say, if you don't have confidence yet, act like you do.

We interpreters are not the stars of a Living History program. Sure, good interpreters are a big attraction to any Living History event, but the real star is the historic site and/or the historical subject being featured. Through all the methods and styles that interpreters use, we work together as a team towards a common goal. And that goal is to communicate why the historic site and/or the historical subject is significant.

Make Yourself Available To Visitors

Be sure that your body language and facial expressions communicate that you are open and approachable. If interpreters are gathered in a group talking amongst themselves, visitors will not want to interrupt to ask questions. When you see folks coming your way, break it up. The public is much more comfortable talking to individuals, particularly those who appear welcoming, open and friendly.

Be Active, Be Doing Something

By doing a simple period chore or craft demonstration, you are creating a casual atmosphere that invites visitors to approach you. and ask the magic question, "What'cha doing?" Once the ice is broken between the visitor and the interpreter, the fun really begins. Take the initiative and strike up conversations with the quiet ones; they will be glad you did.

Some demonstrations are effective

tively done while sitting down. People are less threatened by us when we are sitting down, and they are more likely to come over to see what you are doing. If you discover that not everyone listening to you can see what you're doing, then stand up and direct your presentation to the whole group. When more visitors walk in on the middle of your presentation, complete the first talk and then begin all over again. Your first viewers will then know it's time to move on, and the new folks will step in closer to watch.

Talk To People, Not At Them

It is wise to come up with a short introductory talk about your subject, perhaps 3-5 minutes in length. When you are talking, be aware of the listeners' body language. You don't want to launch into a twenty-minute dissertation for a group when they are looking at their watches and shifting from one foot to another. When your audience starts to step in closer with curious eyes, move into a longer more detailed talk, perhaps 10-15 minutes. You will know by people's mannerisms and questions whether they are ready to move on, or whether you have them fascinated and begging for more.

Be friendly and enjoy yourself. Listen to people's questions carefully, especially children's. We are always surprised how knowledgeable some of our visitors are, and they also have some very interesting stories to tell. Be good listeners as well as good interpreters.

If someone asks you a question that you can't answer, don't be afraid to say, "I don't know." The fact that

they are asking questions shows that you have stirred their interest. Call over another participant to help field the question or refer them to someone else.

Make Your Setting Visitor Friendly

Be aware of the physical arrangement of your interpretation area. There should be a plan for easy visitor flow throughout your program's entire setting. Work to eliminate dead-ends and bottlenecks in your plait. If you need a barrier to separate visitors from the interpreter's areas, be creative and make the barrier part of your period display.

Each demonstration or activity area should be arranged from the visitor's point of view. Display items so they are easy to see, well lit and attractively arranged. A common mistake is to display too many items in a limited space; the visitor's eyes glaze-over because all they see is a jumble of mysterious things. It's more effective to display a limited number of carefully chosen items for visitors to see.

your program's policies on this subject. Obviously you don't let people handle objects that can hurt them.

Hands-on activities are a dynamic addition to interpretive programs and should be supervised by responsible individuals at all times.

Speaking To Crowds

Here are some effective mechanics used by stage actors and professional speakers when talking to large groups. The larger your audience, the louder and more clearly you should speak. Slow down the tempo of your speech. If you're talking in the middle of a group, turn from side to side as you speak so everyone can hear you.

When performing a skit with other interpreters, adjust your mechanics so that the most people can see and hear you. Rather than standing face to face with other characters as you would in normal conversation, stay back a step or two and remain turned slightly toward your audience — just like actors on a

Create a casual atmosphere that invites visitors to ask the magic question, "What'cha doing?"

Hands-On Demonstrations

People are used to being told not to touch things, particularly kids. So when they do get to participate in hands-on activities and handle special things, it leaves a lasting impression. You must use keen judgment here and be certain that all participants are informed of

stage. As you speak in a slightly slowed tempo, turn from side to side directing what you say to fellow interpreters and audience alike. Sometimes nervousness sneaks up on us when we are speaking to a big crowd. Don't let nerves hurry you through your routine. Go slowly, remember these hints and have fun! 🐾

Attending a National Interpreters Workshop

Are you even just a little bit curious about the National Interpreter's Workshop? This year is your chance to come and find out. It will be held in Reno / Sparks Nevada and won't be this close to us again for many years.

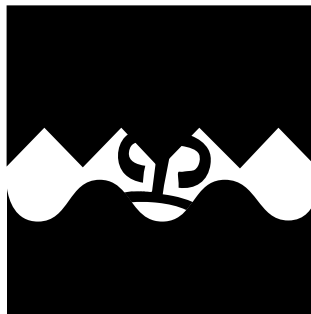
In the last issue we discussed the complexities of "Out of State" travel and considered some potential alternate sources for travel funds. In this piece we hope to take some of the mystery out of the registration process.

NAI members should have already received the registration packet by mail. It can also be downloaded at www.interpnet.com. Don't delay, you'll pay an extra fifty bucks if you wait until after October 7. Also some popular activities will be sold out.

The name and address section is pretty straightforward, but remember your name, organization and city will end up on your workshop nametag. Also, all of the information will be published on the participant list, so exclude anything you don't want to share.

It starts to get a bit confusing when you get into the registration category. Of course, members pay more than non-members. If you want to save a buck, download a membership form and join NAI before you register for the workshop. There are membership categories available that cost less than the difference between member and non-member registration.

reno.tahoe
NIW 2003



S P A R K S
your imagination
November 11-15, 2003

Don't be put off by the registration fee (\$315). It includes a lot more than might be obvious to you. In addition to a very full schedule of activities there are several meals and catered receptions included in the basic fee. So don't skip lunch— it's paid for! You will also receive the Interpretive Sourcebook and a few other nice goodies too.

The Awards Banquet is an option. If you need to save money, skip it (or watch for discounted tickets during the workshop). But if you can swing the cost, I encourage you to give it a try. The banquet caps off the week nicely, and it's the place where we recognize our profession's best. I know it is a bit tough to shell out \$45 for a banquet style chicken dinner, but if you enjoy dancing (even a little) you'll have a great time.

The next option is the Special Events evening. You'll want to, at a minimum, choose the free option. Next you will see three different types

of activities that all happen before the workshop: Preworkshop Training, Interpretive Management Institute and Preworkshop Trips. Remember each of these options is in addition to a full week of training. So while each of them is an excellent opportunity, I usually skip them to save a little money (and save enough room in my brain for the week that follows)!

Toward the bottom of the page you'll see Off-Site Sessions. Remember, in the middle of the workshop, we shift gears for sessions in the field. Be sure to register for one of the off-site sessions as many interpreters find this field-trip day the most instructive (and fun) part of the workshop. Yes, you could just drive over to see one of the sites offered on your own, but you won't get the same experience that you get travelling with a group of interpreters.

The final section offers guest tickets. This option is primarily for spouses who want to join in on evening sessions. Note that even some of the activities that are free to workshop participants have a fee for guest tickets. Don't just assume that the event is free and you can bring a friend — they'll be checking tickets.

The registration form is complex, but only because of the many events, sessions, courses and field trips that the NIW offers. Don't delay, fill it out today. I hope to see YOU in Reno this November. In the next Catalyst watch for a few tips about attending the workshop. 🐾

Radical Rants: Seasonal Justice

By Karen I. Shragg
Wood Lake Minnesota

One of the few shows I try to catch regularly on T.V. is "Live at the Actor's Studio." At the end of the show the host James Lipton asks his guests, "What is your least favorite word?" I always try to answer the question myself. Lately I've been thinking that one of my least favorite words is "seasonal;" not as in Seasonal Affective Disorder, although that is no picnic, and not as in changes in the seasons. I'm referring to the word "seasonal" as in naturalists hired for a portion of the week or year for no benefits. "Seasonal" is a word that too often becomes synonymous with "expendable."

In our ever increasing world of revenue generation, these are the people who are the income generators, the ones who do the birthday parties, the scout groups, the week-end public programs. These frontline folks are the naturalists the public sees, the people that keep them coming back for more, the ones that make budget revenues look good.

In tight budget times, like we are currently experiencing, these positions are some of the first to go. Even though their time is often more directly tied to revenue producing programs, these positions are thrown into the sacrificial flames because reinstating a seasonal position is much easier than trying to get a full time position put back in one's budget. Under these circumstances alternative funding to save seasonal positions



needs to be pursued, not only because it can be easily justified due to the potential revenue gain, but because we need to have entry level positions in our field. We also need these positions to pay enough per hour so that no one is tempted away by a cashiering job at the local hardware store.

The trend to eliminate seasonal positions as a budget saving tool will probably be with us for a long time. While they are on staff we need to be sure that these recent or not-so-recent college graduates, excited about entering our profession, are being treated as professionals. Seasonal naturalists expect to pay their dues by taking the worst hours and living with the stress of zero health benefits. Now added to their stress is the worry that their jobs may be eliminated.

We as managers and full time naturalists who work side by side with these "professionals in entry level positions" as I prefer to call them, need to be sure that they are well

appreciated while we are fortunate enough to have them on staff. They need to feel they are not there just to conduct already-developed programs. These naturalists need to be included at staff meetings and tapped for their creativity. We need to make their experience in these entry level positions fulfilling by giving them many opportunities for professional growth. They may not come to us with finely tuned skills in a specialty area, but they should leave us with many skills and a wide variety of experiences that will give them a better chance of getting a full time job. They need to be encouraged to tough it out until a full time position opens up or we as a profession risk losing them as the most important resource of our profession's future.

James Lipton also asks his guests what their favorite word is. For a long time mine has been "justice." Justice is served when we treat people fairly, and who better to start with than those in our midst who are trying to get their foot in the door of the naturalist profession? 🐾

Exhibit Planning the NPS Way

By Joanie Cahill

District Interpretive Specialist
Anza-Borrego Desert State Park

Those of you involved with exhibit planning, whether it be for a small museum or a large visitor center, may want to consider using a database developed by the National Park Service's Harper's Ferry Center.

The database is called **Museum Exhibit Planner** and works on Filemaker Pro software. Filemaker Pro 6 retails for \$272.00, and your district may already be using it for other applications. A free trial version is available at www.filemaker.com.

The Museum Exhibit Planner application may be downloaded free from the National Park Service at www.nps.gov/hfc/exhibits/exhibit-planner/. Granted, this approach is not for everyone, as you must have at least a beginner's level of comfort with the use of databases. But once you get the NPS file opened-up in the Filemaker Pro software, some users may be able to put it right to work.

Here's how it works. The database provides the structure, and you build your exhibit plan piece by piece. Each piece of text, artifact or photo becomes a record that is categorized and stored. The categories (or fields) are:

L=Labels (exhibit text to be read by visitors including captions, titles, quotations)

G=Graphics (photos, illustrations, maps and other images)



A=Artifacts (objects for display including artifacts, models and specimens)

E=Equipment (catch-all category which includes video monitors, interactive devices, a/v programs)

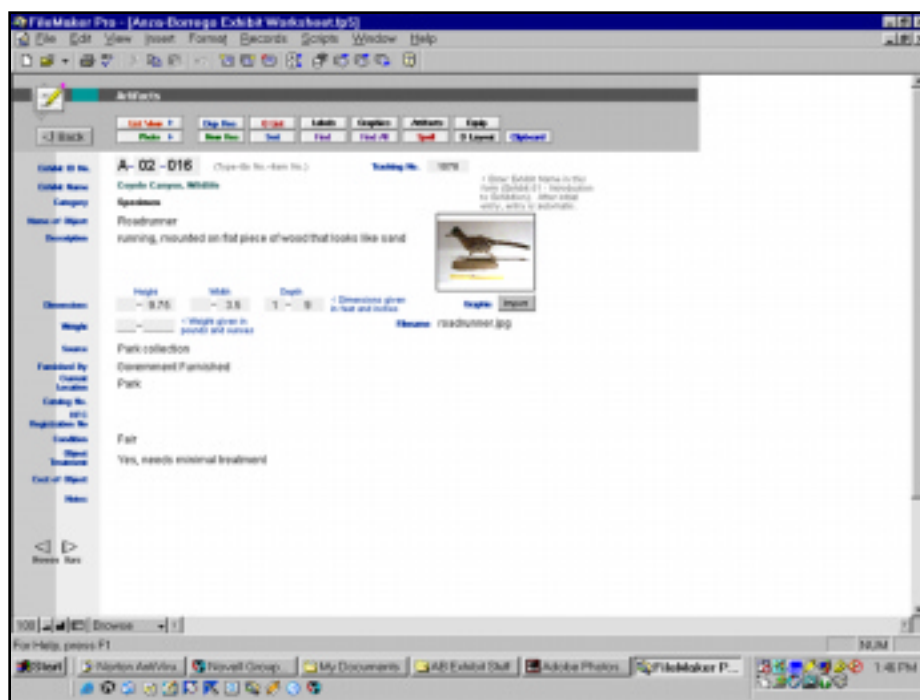
P=Purpose (Purpose, objective and/

or theme of an individual exhibit)

D=Digital Graphic Layouts (computer files integrating multiple elements for output)

Customized work screens speed tasks such as label-writing, editing, graphic sizing, photo reproduction ordering, and artifact tracking. Drop-down menus provide standardized field entries. Museum Exhibit Planner also creates professionally formatted reports and documents to help you convey your plan to stakeholders, donors, or contractors.

Each record (that is, each element of the exhibit plan) is assigned a three-part number. A sample item might have a number like this:



Customized work screens speed tasks such as label-writing, editing, graphic sizing, photo reproduction ordering, and artifact tracking. Drop-down menus provide standardized field entries.

G-04-012

G means it is a graphic

04 means it goes in exhibit number 4

012 means it is item number 12

So, an entire exhibit (Exhibit #4) in the planning stages might look something like this:

P-04-000 Statement of exhibit's purpose

L-04-001 A title, "Coyote Creek: Stream of Life"

L-04-002 A subtitle: Wanted: Riparian Areas

L-04-003 Text developing theme

G-04-004 Map of Coyote Canyon and Coyote Creek

A-04-005 Taxidermied specimen, bighorn sheep

A-04-006 Taxidermied specimen, mountain lion

A-04-007 Taxidermied specimen, least Bell's vireo

L-04-008 Caption for diorama

G-04-009 Background photo for diorama

E-04-010 A/V program on bighorn sheep

L-04-011 Label for under A/V show push button

When it comes time to print lists or reports, you can print a comprehensive plan, a plan that just lists purposes, a plan that just lists artifacts, etc. Here is an example page from reports I've printed. You may notice this plan is in the beginning stages, so not all elements are present.

I've been using Museum Exhibit Planner for about six months, and it has become a favorite tool. By

providing the structure and organized storage of information and graphics, the database allows me to spend more time on creativity. Once you understand the system, it is easy to use and organizes things logically.

Don't confuse this with TMS or other database software used for museum collections. While they do a great job at managing collections, this is a specialty application focused on exhibit planning. Sure, any database

could be made to do something like this, but Museum Exhibit Planner provides a well-tested, proven structure that is ready to use.

If you're interested in learning more about Museum Exhibit Planner, be sure to attend the National Interpreter's Workshop in Reno this November. Staff from the Harper's Ferry Center will be there to demonstrate the database and provide instruction. 🐾

| Comprehensive List | | | |
|--|------------------|---|---------------------------------------|
| All exhibit elements listed in order of presentation | | | |
| Ex ID No. | Element Category | Description | Word Count, Source, or Catalog Number |
| D-00-000 | | | |
| Introduction and Welcome | | | |
| G-01-000 | Map | Map of the United States with the four major deserts | Contract designer |
| P-01-000 | Exhibit Purpose | To orient visitors to the park's location and the overall site | 180 |
| L-01-001 | Title | Where Am I? | 3 |
| L-01-002 | Primary text | Welcome to Anza-Borrego Desert State Park in the | 36 |
| L-01-003 | Subtitle | North America's Four Deserts | 4 |
| L-01-004 | Secondary text | Each of North America's deserts is alike in some ways and | 60 |
| L-01-005 | Caption | The mountains of the Coastal Range to the west cause rain | 27 |
| L-01-006 | Caption | Here at the Visitor Center, the annual rainfall averages just | 26 |
| L-01-007 | Caption | Right now, visitors at the Grand Canyon in Arizona are | 31 |
| Coyote Canyon -Wildlife | | | |
| P-02-000 | Exhibit Purpose | To show visitors examples of wildlife found in Coyote | 91 |
| A-02-001 | Specimen | Taxidermied mountain lion lying on its side | |
| E-02-001 | Video program | Several short segments of the current Bighorn video could | Park with editing |
| L-02-001 | Title/Specimen | Imagine A World Without Wildlife | 8 |
| A-02-002 | Specimen | | |
| L-02-002 | Primary text | Wildlife Need Habitat | 38 |
| A-02-003 | Specimen | | |
| L-02-003 | Secondary title | Human Care | 58 |
| A-02-004 | Specimen | | |
| L-02-004 | Specimen | | |
| A-02-005 | Specimen | | |
| L-02-005 | Caption | Wildlife Watching | 64 |
| L-02-006 | Quotation | It is no longer the survival of the fittest but the survival of | 14 |
| A-02-006 | Specimen | | |
| Anza-Borrego Desert State Park Visitor Center Exhibit Replacement Final Exhibit Plan | | | June 30, 2003 |

Museum Exhibit Planner also creates professionally formatted reports. You can print a comprehensive plan, a plan that just lists purposes, a plan that just lists artifacts, etc.

The Road Less Traveled

Identity Crisis?

By Jaime Mendez

It was bound to happen. The day was absolutely gorgeous – sunny with not a cloud in the sky. It was the perfect type of day to be outside soaking up the sunshine and leisurely walking down a favorite forest trail. In fact, that was exactly what I was doing. Today was the day to actually stop and smell the flowers – to put all my cares away. Then the sky grew suddenly dark, blocking out the warm summer sun. The gentle breeze began to gain momentum and grow chill. The leisurely stroll became a brisk walk as I hastened toward home. It was as if this day couldn't decide what it really was. How absurd – a day having an identity crisis!

It's bound to happen. During a casual conversation someone asks where you work. Before you know it you're telling them all about your



languages." The quizzical expressions make it abundantly clear that Freeman Tilden is definitely not required reading for this group. It's as if these people had never been to a visitor center or taken a hike. How absurd – not knowing the difference between a ranger and an interpreter!

It did happen. The Native American didn't want to talk to the interpreter because he thought the interpreter was an anthropologist. The guide didn't want to be reclassified as

talks. The archeologist was clearly excited about "his" site and wanted to interpret the excavation himself. The quizzical expression on the interpreter's face made it abundantly clear that Sam Ham needed to have a serious talk with this group. How absurd – park professionals with an identity crisis!

It doesn't have to continue. Just like the weather, attitudes can change for the better. Interpretation is communication. Perhaps one of our greatest challenges is communicating to our co-workers what interpretation really is and how coordinating interpretive efforts can help all of us reach our goals. Even flawlessly executed interpretation will probably not be successful in convincing visitors that every park employee is not a ranger but it should address the more serious misconceptions about interpretation and interpreters. Talented, educated park professionals with an identity crisis – how absurd! 🐾

Perhaps the greatest challenge is communicating to our co-workers what interpretation really is and how coordinating interpretive efforts can enhance a park's interpretive program.

park, historical monument or museum. The conversation gets livelier as others join in with their adventures at a favorite park. You're really enjoying the repartee when someone comments that it must be exciting to be a forest ranger. "I'm an interpreter." "Oh, I didn't know that rangers had to translate foreign

an interpreter because interpreters would have to work in the visitor center. The naturalist didn't want to be called a guide or an interpreter because naturalists do not give tours or work in the visitor center. The ranger avoided campfire programs and cringed at interpretive training but loved leading hikes and giving nature

Want to see your story in print? Tell me who you are, where you work, and what you do. E-mail me at tahquish@att.net

California's Tapestry

A Section of *The Catalyst*

Office of Community Involvement

Issue #17 - Summer 03

Diversity Seminar

On June 4th of this year the Golden State Environmental Education Consortium (GSEEC), as part of the national Environmental Education and Training Partnership (EETAP) sponsored a Diversity Seminar in Los Angeles. The topic was "Developing a Roadmap to Diverse, Effective, and Dynamic Leadership in the field of Environmental Education in California."

GSEEC was fortunate to have Professor Emeritus from UC Riverside Carlos E. Cortes present to facilitate the event. Since 1990 he has served on the summer faculty of the Harvard Institutes for Higher Education and is also on the faculty of the Summer Institute for Intercultural Communication. Highlights from Dr. Cortes' talk as it relates to education and interpretation are as follows:

Dr. Cortes stated that there are six "Imperatives" in dealing with diversity.

1) **Perceptions:** As we evaluate multiculturalism as part of our society, let's look at our views. How do they fit with what we do or don't do? Are they consistent with current informa-

There are six "Imperatives" in dealing with diversity: Perceptions, Interactions, Balancing, Limits, Equity and Change.

tion such as urban communities and minorities voting for park bonds at higher percentage than white rural communities?

2) **Interactions:** Consider different perspectives. People have different views and ways of expressing their understanding of the environment and how to care for it. How does the "Culture" of parks reflect or not reflect the variety of ways people see themselves as stewards of natural and cultural resources?

3) **Balancing:** To be inclusive in a multicultural society, we need to balance how and what we present to represent many cultures.

4) **Limits:** We all have our limitations when it comes to our personal beliefs on diversity. Recogn-

nize where your limits are and realize that as a professional, in the business of education and interpretation, we do not place our own limits in our work.

5) **Equity:** On this point, we know that one person of a particular group does not speak for everyone from that group. However, many people in that group may have the same perceptions as that one person. So, be fair and reasonable; correct what is causing a bias.

6) **Change:** California is changing. We do not always have to do the traditional things such as campfires, songs, nature activities and quoting the same old preservationists. It takes effort to change and there is a degree of risk to consider as well. However, there is assurance in what will happen if we do not change.

These "Imperatives" are consistent with the comments of other leaders who have addressed diversity in our field. They can provide a base for a "Roadmap."

Carlos Cortes has two new books, *The Making – and Remaking of a Multiculturalist* and *The Children are Watching, How the Media Teach about Diversity*. They are available from Teachers College Press (www.tcpress.com) which has many other interesting books on education.

Submit articles and comments to: Jack K. Shu, Park Superintendent, OCI-Southern California, c/o Southern Service Center, 8885 Rio San Diego Drive, San Diego 92108, Ph# (619) 220-5330.

Catalyst Summer 2003 Contents

| | |
|---|---------|
| From the Editor | Page 3 |
| Interpreters' Resources | Page 4 |
| Dear Master Interpreter | Page 5 |
| History Goes Virtual: CSRM Library Online | Page 6 |
| State Parks Again Wins Big at SIOC Awards | Page 8 |
| Putting Geologic Time Into Perspective | Page 10 |
| Cadets Practice Interpretive Techniques | Page 13 |
| Presentation Hints for Living History | Page 14 |
| Dummy's Guide to Attending a NIW | Page 16 |
| Radical Rants: Seasonal Justice | Page 17 |
| Exhibit Planning the NPS Way | Page 18 |
| The Road Less Traveled | Page 20 |
| California's Tapestry | Page 21 |



Interpretation & Education

Room 1431

P.O. Box 942896

Sacramento, CA 94296-0001

Please check your address label!
Any changes? Contact Rocky at
(916) 654-2249 or procksvold@parks.ca.gov.